

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 APR 02 Web Page for STN Seminar Schedule - N. America

NEWS 2 APR 02 CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases

NEWS 3 APR 02 PATDPAFULL: Application and priority number formats enhanced

NEWS 4 APR 02 DWPI: New display format ALLSTR available

NEWS 5 APR 02 New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes

NEWS 6 APR 02 EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948

NEWS 7 APR 07 CA/Capplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields

NEWS 8 APR 07 50,000 World Traditional Medicine (WTM) Patents Now Available in Capplus

NEWS 9 APR 07 MEDLINE Coverage Is Extended Back to 1947

NEWS 10 JUN 16 WPI First View (File WPIFV) will no longer be available after July 30, 2010

NEWS 11 JUN 18 DWPI: New coverage - French Granted Patents

NEWS 12 JUN 18 CAS and FIZ Karlsruhe announce plans for a new STN platform

NEWS 13 JUN 18 IPC codes have been added to the INSPEC backfile (1969-2009)

NEWS 14 JUN 21 Removal of Pre-IPC 8 data fields streamline displays in CA/Capplus, CASREACT, and MARPAT

NEWS 15 JUN 21 Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers -- EMBASE Classic on STN

NEWS 16 JUN 28 Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol

NEWS 17 JUN 29 Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN

NEWS 18 JUL 19 Enhancement of citation information in INPADOC databases provides new, more efficient competitor analyses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 07:21:25 ON 21 JUL 2010

FILE 'REGISTRY' ENTERED AT 07:21:40 ON 21 JUL 2010
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 JUL 2010 HIGHEST RN 1233120-12-1
DICTIONARY FILE UPDATES: 19 JUL 2010 HIGHEST RN 1233120-12-1

New CAS Information Use Policies. enter **HELP USAGE TERMS** for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stndgen/stndoc/properties.html>

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:26:51 ON 21 JUL 2010

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINTID:SSSPATA1623PAZ

PASSWORD:

***** RECONNECTED TO STN INTERNATIONAL *****
SESSION RESUMED IN FILE 'REGISTRY' AT 07:29:22 ON 21 JUL 2010
FILE 'REGISTRY' ENTERED AT 07:29:22 ON 21 JUL 2010
COPYRIGHT (C) 2010 American Chemical Society (ACS)

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE

ENTRY

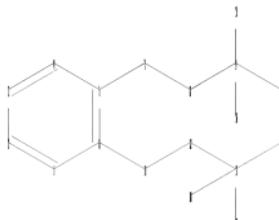
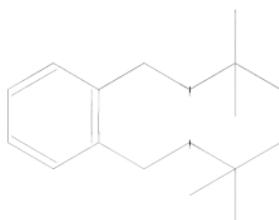
4.41

TOTAL

SESSION

4.63

=>
Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10589971\10589971_elected_ligand.str



chain nodes :

7 8 9 10 11 12 13 14 15 16 17 18

ring nodes :

1 2 3 4 5 6

chain bonds :

5-7 6-11 7-8 8-9 9-10 9-15 9-16 11-12 12-13 13-14 13-17 13-18

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact bonds :

5-7 6-11 7-8 8-9 9-10 9-15 9-16 11-12 12-13 13-14 13-17 13-18

normalized bonds :

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Match level :

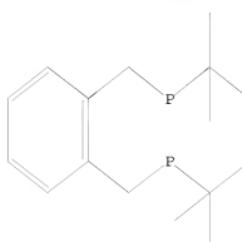
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 11 exact full
FULL SEARCH INITIATED 07:30:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L2 0 SEA EXA FUL L1

=> search 11 sss sam
SAMPLE SEARCH INITIATED 07:31:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

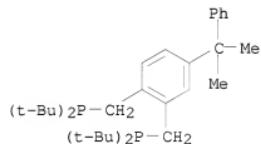
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 11 TO 389
PROJECTED ANSWERS: 1 TO 80

L3 1 SEA SSS SAM L1

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Phosphine, 1,1'-(14-(1-methyl-1-phenylethyl)-1,2-
phenylene)bis(methylene)bis[1,1-bis(1,1-dimethylethyl)-, methanesulfonate
(1:2)
MF C33 H54 P2 . 2 C H4 O3 S

CM 1

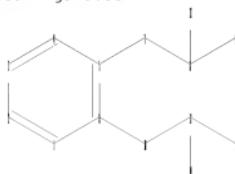
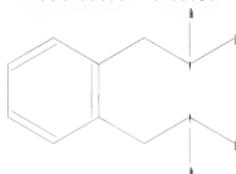


CM 2



ALL ANSWERS HAVE BEEN SCANNED

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Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary
files\10589971\10589971 correct elected ligand.str

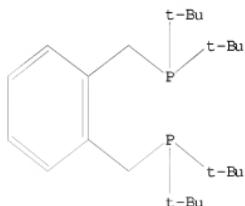


chain nodes :
7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
5-7 6-10 7-8 8-9 8-13 10-11 11-12 11-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact bonds :
5-7 6-10 7-8 8-9 8-13 10-11 11-12 11-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L4 STRUCTURE UPLOADED

=> d 14
L4 HAS NO ANSWERS
L4 STR



Structure attributes must be viewed using STN Express query preparation.

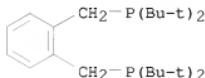
=> search 14 exact full
FULL SEARCH INITIATED 07:35:17 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 28 TO ITERATE
100.0% PROCESSED 28 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L5 1 SEA EXA FUL L4

=> d scan

L5 1 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Phosphine, 1,1'-(1,2-phenylenebis(methylene))bis[1,1-bis(1,1-dimethylethyl)-
MF C24 H44 P2

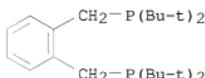


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
RN 121954-50-5 REGISTRY
ED Entered STN: 04 Aug 1989
CN Phosphine, 1,1'-(1,2-phenylenebis(methylene))bis[1,1-bis(1,1-dimethylethyl)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phosphine, [1,2-phenylenebis(methylene)]bis[bis(1,1-dimethylethyl)- (9CI)
OTHER NAMES:
CN 1,2-Bis[(di-tert-butylphosphino)methyl]benzene
CN 1,3-Bis[(di-tert-butylphosphino)methyl]benzene
MF C24 H44 P2
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

54 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
54 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
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FULL ESTIMATED COST

140, 90 141, 12

FILE 'CAPLUS' ENTERED AT 07:35:53 ON 21 JUL 2010
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FILE COVERS 1907 - 21 Jul 2010 VOL 153 ISS 4
FILE LAST UPDATED: 20 Jul 2010 (20100720/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

CPlus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at: www.cas.org/casinfo

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```

=> 15
L6           54 L5

=> ethylene or ethene
      631827 ETHYLENE
      3527 ETHYLENES
      633381 ETHYLENE
                           (ETHYLENE OR ETHYLENES)
      40688 ETHENE
      1286 ETHENES
      41272 ETHENE
                           (ETHENE OR ETHENES)
I.7   658256 ETHYLENE OR ETHENE

```

=> 16 and 17

=> 2 18 1=14 +i

L8 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Method for producing mono-hydroxyfunctionalized dialkylphosphinic acids and esters and salts thereof and use thereof

L8 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Palladium Complexes of the Heterodiphosphine σ -C6H4(CH2PtBu2)(CH2PPh2) Are
Highly Selective and Robust Catalysts for the Hydromethoxycarbonylation of
Ethene

L8 ANSWER 3 OF 14 CAPIUS COPYRIGHT 2010 ACS on STN

TI A process for the carbonylation of an ethylenically unsaturated compound and a catalyst system

L8 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation of Group VIII metal phosphine complexes for use in the carbonylation of ethylenically unsaturated compounds

L8 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Improved carbonylation catalyst system

L8 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Catalyst system for carbonylating ethylenically unsaturated compounds

L8 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Olefin polymerization in the presence of a dehydrogenation catalyst

L8 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for the hydroformylation of ethylenically unsaturated compounds using chlorine-containing catalyst and/or solvent

L8 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Manufacture of dialkyl ketones by reductive carbonylation of α -olefins

L8 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Characterization and Dynamics of $[\text{Pd}(\text{L-L})\text{H}(\text{solv})]^+$, $[\text{Pd}(\text{L-L})(\text{CH}_2\text{CH}_3)]^+$, and $[\text{Pd}(\text{L-L})(\text{C(OEt})](\text{THF})]^+$ ($\text{L-L} = 1,2-(\text{CH}_2\text{PBut}_2)\text{C}_6\text{H}_4$): Key Intermediates in the Catalytic Methoxycarbonylation of Ethene to Methylpropanoate

L8 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process and Palladium-bidentate phosphine ligand catalysts for the carbonylation of ethylene into propionic acid and its esters

L8 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Carbonylation of ethylene and stable catalyst system containing bidentate phosphine compounds for

L8 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Synthesis of coordinatively unsaturated diphosphine nickel(II) and palladium(II) β -agostic ethyl cations: x-ray crystal structure of $[\text{Ni}[\text{tert-Bu}_2\text{P}(\text{CH}_2)\text{PBu-tert}_2](\text{C}_2\text{H}_5)][\text{BF}_4]$

L8 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Control of intramolecular β -hydrogen migration in coordinatively unsaturated (diphosphine)platinum ethyl cations

=> d 18 10-14 ti fbib abs

L8 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Characterization and Dynamics of $[\text{Pd}(\text{L-L})\text{H}(\text{solv})]^+$, $[\text{Pd}(\text{L-L})(\text{CH}_2\text{CH}_3)]^+$, and $[\text{Pd}(\text{L-L})(\text{C(OEt})](\text{THF})]^+$ ($\text{L-L} = 1,2-(\text{CH}_2\text{PBut}_2)\text{C}_6\text{H}_4$): Key Intermediates in the Catalytic Methoxycarbonylation of Ethene to Methylpropanoate
AN 2002:227362 CAPLUS
DN 136:401868
TI Characterization and Dynamics of $[\text{Pd}(\text{L-L})\text{H}(\text{solv})]^+$, $[\text{Pd}(\text{L-L})(\text{CH}_2\text{CH}_3)]^+$, and $[\text{Pd}(\text{L-L})(\text{C(OEt})](\text{THF})]^+$ ($\text{L-L} = 1,2-(\text{CH}_2\text{PBut}_2)\text{C}_6\text{H}_4$): Key Intermediates in the Catalytic Methoxycarbonylation of Ethene to Methylpropanoate
AU Clegg, William; Eastham, Graham R.; Elsegood, Mark R. J.; Heaton, Brian

T.; Iggo, Jonathan A.; Tooze, Robert P.; Whyman, Robin; Zacchini, Stefano
 CS Chemistry Department, University of Newcastle, Newcastle-upon-Tyne, NE1
 7RU, UK
 SO Organometallics (2002), 21(9), 1832-1840
 CODEN: ORGND7; ISSN: 0276-7333
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 136:401868
 AB A detailed spectroscopic study has allowed the solution structure and dynamic properties of all the intermediates in the Pd-catalyzed methoxycarbonylation of ethene to be established.
 $[\text{Pd}(\text{L-L})\text{H}(\text{solv})]^+$ ($\text{L-L} = 1,2\text{-}(\text{tBu2PCH2})2\text{C6H4}$; solv = MeOH, 1a; PrOH, 1b; THF, 1c; EtCN, 1d) is static, and the two inequivalent P atoms do not become equivalent through solvent exchange over all the temps. studied.
 $[\text{Pd}(\text{L-L})\text{Et}]^+$, 2, contains a strong β -agostic C-H interaction which is remarkably stable and is not displaced even in strongly coordinating solvents such as EtCN. Cu and C β of the Et group in 2 become equivalent via a stereospecific interchange involving $[\text{Pd}(\text{L-L})\text{H}(\eta^2\text{-C2H4})]^+$ without making the two P atoms equivalent; at higher temps. these two inequivalent P atoms do become equivalent probably via a T-shaped intermediate. For $[\text{Pd}(\text{L-L})(\text{C}(\text{O})\text{Et})(\text{solv})]^+$, 6, there is no β -agostic C-H interaction and multiple 13C-labeling of the C(O)Et group shows that the inequivalent P atoms become equivalent via movement of the intact C(O)Et group. The crystal structure of the related complex $[\text{Pd}(\text{L-L})(\text{C}(\text{O})\text{Et})\text{Cl}]$ cocrystd. with dibenzylideneacetone was determined
 OSC.G 45 THERE ARE 45 CAPLUS RECORDS THAT CITE THIS RECORD (46 CITINGS)
 RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2010 ACS ON STN
 TI Process and Palladium-bidentate phosphine ligand catalysts for the carbonylation of ethylene into propionic acid and its esters
 AN 1998:635736 CAPLUS
 DN 129:232317
 OREF 129:47239a, 47242a
 TI Process and Palladium-bidentate phosphine ligand catalysts for the carbonylation of ethylene into propionic acid and its esters
 IN Pearson, Jean Margaret; Hadden, Raymond Anthony
 PA Imperial Chemical Industries PLC, UK
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9841495	A1	19980924	WO 1998-GB629	19980227
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CA	2282515	A1	19980924	CA 1998-2282515	19980227
CA	2282515	C	20070501	GB 1997-5699	A 19970319
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AU	9866286	A	19981012	AU 1998-66286	19980227

AU 737772	B2	20010830	GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
EP 970038	A1	20000112	EP 1998-908202	19980227
EP 970038	B1	20020410		
EP 970038	B2	20050907		
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HU 2000000772	A2	20000728	HU 2000-772	19980227
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HU 226818	B1	20091130		
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JP 2001517218	T	20011002	JP 1998-540218	19980227
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PT 970038	E	20020731	PT 1998-908202	19980227
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ES 2172114	T3	20020916	ES 1998-87103149	19980304
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CN 1245371	C	20060315	CN 1998-803440	19980227
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ZA 9801982	A	19980921	ZA 1998-1982	19980309
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US 6284919	B1	20010904	US 1999-396637	19990915
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US 20010051745	A1	20011213	US 2001-885187	20010621
US 6489506	B2	20021203		
			GB 1997-5699	A 19970319
			US 1999-396637	A1 19990915

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 129:232317

AB Ethylene is carbonylated into propanoic acid and its esters (e.g., Me propionate) in high yield and selectivity by its liquid-phase carbonylation, in the presence of a catalyst system comprising Pd or a Pd compound, a bidentate phosphine ligand [e.g., 1,2-bis(di-*tert*-butylphosphinomethyl)benzene], and a source of anions (e.g., methanesulfonic acid), and in the presence of a source of hydroxyl groups (e.g., methanol). The carbonylation is carried out using a molar ratio of ethylene to carbon monoxide greater than 1:1, and preferably greater than 5:1; these higher ratios of ethylene to carbon monoxide result in increased catalyst turnover nos.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN

TI Carbonylation of ethylene and stable catalyst system containing

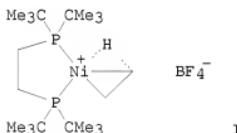
bidentate phosphine compounds for					
AN	1996:527331	CAPLUS			
DN	125:145592				
OREF	125:27211a,27214a				
Carbonylation of ethylene and stable catalyst system containing bidentate phosphine compounds for					
IN	Tooze, Robert Paul; Eastham, Graham Ronald; Whiston, Keith; Wang, Xiao Lan				
PA	Imperial Chemical Industries Plc, UK				
SO	PCT Int. Appl., 14 pp.				
CODEN: PIXXD2					
DT	Patent				
LA	English				
FAN.CNT	1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9619434	A1	19960627	WO 1995-GB3021	19951222
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CA	2207672	A1	19960627	CA 1995-2207672	19951222
CA	2207672	C	20061010	GB 1994-25911	A 19941222
				WO 1995-GB3021	W 19951222
AU	9643095	A	19960710	AU 1996-43095	19951222
AU	701935	B2	19990211	GB 1994-25911	A 19941222
				WO 1995-GB3021	W 19951222
EP	799180	A1	19971008	EP 1995-941792	19951222
EP	799180	B1	19990630		
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CN	1171098	A	19980121	CN 1995-197050	19951222
CN	1073546	C	20011024		
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HU	77016	A2	19980302	HU 1997-2202	19951222
HU	215407	B	19981228		
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JP	10511034	T	19981027	JP 1995-519611	19951222
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				WO 1995-GB3021	W 19951222
AT	181725	T	19990715	AT 1995-941792	19951222
				GB 1994-25911	A 19941222
ES	2133837	T3	19990916	ES 1995-941792	19951222
				GB 1994-25911	A 19941222
NZ	297842	A	20000128	NZ 1995-297842	19951222
				GB 1994-25911	19941222
				WO 1995-GB3021	19951222
CZ	288904	B6	20010912	CZ 1997-1932	19951222
				GB 1994-25911	A 19941222
JP	3949716	B2	20070725	JP 1996-519611	19951222
				GB 1994-25911	A 19941222
				WO 1995-GB3021	W 19951222
US	6348621	B1	20020219	US 1999-860159	19991013
				GB 1994-25911	A 19941222
				WO 1995-GB3021	W 19951222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Ethylene is reacted with CO in the presence of an OH source, e.g., an alc., and a catalyst system a Group VIII metal (compound) and a bidentate phosphine compound, e.g., bis(di-tert-butylphosphino)-o-xylene (I). Use of the bidentate phosphine compds. provides remarkably stable catalysts which require little replenishment, leads to high reaction rates, minimizes impurity formation at high conversions. Thus, ethylene was carbonylated in the presence of MeOH and a catalyst system comprising palladium acetate 0.1, I 0.3, and methanesulfonic acid 0.24 mmol, with reaction rate 40,000 and selectivity 99.95 with no Pd precipitation

OSC.G 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Synthesis of coordinatively unsaturated diphosphine nickel(II) and palladium(II) β -agostic ethyl cations: x-ray crystal structure of $[\text{Ni}[\text{tert-Bu2P}(\text{CH}_2)\text{2PBu-tert2}](\text{C}_2\text{H}_5)][\text{BF}_4]$
AN 1992:59613 CAPLUS
DN 116:59613
OREF 116:10325a,10328a
TI Synthesis of coordinatively unsaturated diphosphine nickel(II) and palladium(II) β -agostic ethyl cations: x-ray crystal structure of $[\text{Ni}[\text{tert-Bu2P}(\text{CH}_2)\text{2PBu-tert2}](\text{C}_2\text{H}_5)][\text{BF}_4]$
AU Conroy-Lewis, Fiona M.; Mole, Laura; Redhouse, Alan D.; Litster, Stephen A.; Spencer, John L.
CS Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5 4WT, UK
SO Journal of the Chemical Society, Chemical Communications (1991), (22), 1601-3
CODEN: JCCCAT; ISSN: 0022-4936
DT Journal
LA English
OS CASREACT 116:59613
GI



AB Protonation of $[\text{M}(\text{L}2)(\eta^2\text{-C}_2\text{H}_4)]$ ($\text{L}2$ = chelating diphosphine; $\text{M} = \text{Ni}$, Pd) with HBF_4 affords a series of cations $[\text{M}(\text{L}2)(\text{C}_2\text{H}_5)]^+$ characterized as β -agostic Et complexes by NMR spectroscopy and x-ray structure anal. E.g., the structure of I was determined by crystallog.

OSC.G 40 THERE ARE 40 CAPLUS RECORDS THAT CITE THIS RECORD (40 CITINGS)

L8 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2010 ACS on STN
TI Control of intramolecular β -hydrogen migration in coordinatively unsaturated (diphosphine)platinum ethyl cations
AN 1991:43147 CAPLUS
DN 114:43147
OREF 114:7517a,7520a
TI Control of intramolecular β -hydrogen migration in coordinatively unsaturated (diphosphine)platinum ethyl cations
AU Mole, Laura; Spencer, John L.; Carr, Nicholas; Orpen, A. Guy
CS Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5 4WT, UK

SO Organometallics (1991), 10(1), 49-52
CODEN: ORGND7; ISSN: 0276-7333
DT Journal
LA English
AB Protonation of the complexes [Pt(C₂H₅)₂L₂] or [Pt(η 2-C₂H₄)L₂] {L₂ = o-(tert-Bu₂PCH₂)₂C₆H₄ (dbpx), tert-Bu₂P(CH₂)₃P(Bu-tert)₂ (dbpp) and tert-Bu₂P(CH₂)₂(Bu-tert)₂ (dbpe)} with HBF₄·OEt₂ or HBF₄·OMe₂ affords the complexes [Pt(C₂H₅)(dbpx)][BF₄] (I), [Pt(C₂H₅)(dbpp)][BF₄] (II), and [Pt(η 2-C₂H₄)(dbpe)][BF₄] (III), resp. The new complexes were characterized by ¹H, ¹³C and ³¹P variable temperature

NMR spectroscopy and in the case of [Pt(C₂H₅)(dbpp)][CB₁₁H₁₂], which was prepared by protonation of [Pt(C₂H₅)₂(dbpp)] with HCB₁₁H₁₂, by and x-ray crystallog. study. The complexes I and II exhibit a two-electron, three-center Pt-H-C agostic bond whereas III has a cis-ethene-hydride ground state structure. Thus, the size of the chelating diphosphine ligand controls the extent of β -hydrogen transfer from carbon to platinum. The NMR spectroscopic studies show that all three cations undergo two low energy fluxional processes ($\Delta G_{\text{dibldag}}$, $\leq 8 \pm 1.5$ Kcal mol⁻¹) in soln: (a) agostic Me rotation and (b) β -elimination/ ethene rotation/hydride migration. A combination of these processes scrambles all five protons and both carbon atoms.

OSC.G 48 THERE ARE 48 CAPLUS RECORDS THAT CITE THIS RECORD (48 CITINGS)

=> logoff hold
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 33.58 174.70

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -4.25 -4.25

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:45:33 ON 21 JUL 2010

Connecting via Winsock to STN

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LOGINID:SSSPATA1623PAZ

PASSWORD:
* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:18:33 ON 21 JUL 2010
FILE 'CAPLUS' ENTERED AT 08:18:33 ON 21 JUL 2010
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 33.58 174.70

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -4.25 -4.25

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.58	174.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.25	-4.25

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:18:46 ON 21 JUL 2010

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

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PASSWORD:  
* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *  
SESSION RESUMED IN FILE 'CAPLUS' AT 10:05:31 ON 21 JUL 2010  
FILE 'CAPLUS' ENTERED AT 10:05:31 ON 21 JUL 2010  
COPYRIGHT (C) 2010 AMERICAN CABLE TELEVISION (ACIS)
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.58	174.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.25	-4.25

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=> logoff hold
COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                    ENTRY SESSION
FULL ESTIMATED COST                           34.08    175.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                    ENTRY SESSION
CA SUBSCRIBER PRICE                         -4.25    -4.25

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SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:05:53 ON 21 JUL 2010

Connecting via Winsock to STN

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LOGINTID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****
NEWS 1 Web Page for STN Seminar Schedule - N. America

NEWS 2	APR 02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS 3	APR 02	PATDPAFULL: Application and priority number formats enhanced
NEWS 4	APR 02	DWPI: New display format ALLSTR available
NEWS 5	APR 02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS 6	APR 02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS 7	APR 07	CA/Caplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
NEWS 8	APR 07	50,000 World Traditional Medicine (WTM) Patents Now Available in Caplus
NEWS 9	APR 07	MEDLINE Coverage Is Extended Back to 1947
NEWS 10	JUN 16	WPI First View (File WPIFV) will no longer be available after July 30, 2010
NEWS 11	JUN 18	DWPI: New coverage - French Granted Patents
NEWS 12	JUN 18	CAS and FIZ Karlsruhe announce plans for a new STN platform
NEWS 13	JUN 18	IPC codes have been added to the INSPEC backfile (1969-2009)
NEWS 14	JUN 21	Removal of Pre-IPC 8 data fields streamline displays in CA/Caplus, CASREACT, and MARPAT
NEWS 15	JUN 21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers -- EMBASE Classic on STN
NEWS 16	JUN 28	Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol
NEWS 17	JUN 29	Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN
NEWS 18	JUL 19	Enhancement of citation information in INFADOC databases provides new, more efficient competitor analyses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

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FILE 'HOME' ENTERED AT 12:17:30 ON 21 JUL 2010

=> carbonylat?

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

```
=> file caplus
COST IN U.S. DOLLARS
SINCE FILE          TOTAL
ENTRY          SESSION
0.22          0.22
FULL ESTIMATED COST
```

FILE 'CAPLUS' ENTERED AT 12:17:55 ON 21 JUL 2010
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FILE COVERS 1907 - 21 Jul 2010 VOL 153 ISS 4
FILE LAST UPDATED: 20 Jul 2010 (20100720/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

CPlus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> carbonylat?
L1      14775 CARBONYLAT?

=> bidentate(l)phosphine
      28719 BIDENTATE
      145 BIDENTATES
      28808 BIDENTATE
      (BIDENTATE OR BIDENTATES)
      78892 PHOSPHINE
      19161 PHOSPHINES
      84367 PHOSPHINE
      (PHOSPHINE OR PHOSPHINES)
L2      2049 BIDENTATE(L)PHOSPHINE
```

```
=> l1 and l2
L3      84 L1 AND L2
```

```
=> acid
      5095790 ACID
      1764479 ACIDS
L4      5643214 ACID
      (ACID OR ACIDS)
```

```
=> l4 (l)13
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L4 (L)L3'
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L5 41 L4 (L)L3

=> ratio(l)acid
1460601 RATIO
371204 RATIOS
1710600 RATIO
(RATIO OR RATIOS)
5095790 ACID
1764479 ACIDS
5643214 ACID
(ACID OR ACIDS)

L6 258572 RATIO(L)ACID

=> 15 and 16

L7 5 L5 AND L6

=> d 17 1-5 ti

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process and Palladium-bidentate phosphine ligand
catalysts for the carbonylation of ethylene into propionic
acid and its esters

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for the carbonylation polymerization of functionalized
olefinitely unsaturated compounds and polyesters and polyanhydrides
therefrom

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for the carbonylation polymerization of dienes in the
presence of dicarboxylic acids or diols as coreactants

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for synthesis of amidoacids using a cobalt catalyst and a
bidentate phosphine ligand

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Polyketones

=> d 17 1-5 ti fbib abs

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process and Palladium-bidentate phosphine ligand
catalysts for the carbonylation of ethylene into propionic
acid and its esters

AN 1998:635736 CAPLUS

DN 129:232317

OREF 129:47239a,47242a

TI Process and Palladium-bidentate phosphine ligand
catalysts for the carbonylation of ethylene into propionic
acid and its esters

IN Pearson, Jean Margaret; Hadden, Raymond Anthony

PA Imperial Chemical Industries PLC, UK

SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9841495	A1	19980924	WO 1998-GB629	19980227

W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2282515	A1	19980924	GB 1997-5699	A 19970319
CA 2282515	C	20070501	CA 1998-2282515	19980227
AU 9866286	A	19981012	GB 1997-5699	A 19970319
AU 737772	B2	20010830	WO 1998-GB629	W 19980227
EP 970038	A1	20000112	AU 1998-66286	19980227
EP 970038	B1	20020410	GB 1997-5699	A 19970319
EP 970038	B2	20050907	WO 1998-GB629	W 19980227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, RO			EP 1998-908202	19980227
BR 9808354	A	20000523	GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
			BR 1998-8354	19980227
			GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
HU 2000000772	A2	20000728	HU 2000-772	19980227
HU 2000000772	A3	20001128		
HU 226818	B1	20091130		
			GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
JP 2001517218	T	20011002	JP 1998-540218	19980227
JP 4143133	B2	20080903		
			GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
AT 215928	T	20020415	AT 1998-908202	19980227
			GB 1997-5699	A 19970319
			WO 1998-GB629	W 19980227
PT 970038	E	20020731	PT 1998-908202	19980227
			GB 1997-5699	A 19970319
ES 2172114	T3	20020916	ES 1998-908202	19980227
			GB 1997-5699	A 19970319
CZ 295078	B6	20050518	CZ 1999-3269	19980227
			GB 1997-5699	A 19970319
CN 1245371	C	20060315	CN 1998-803440	19980227
			GB 1997-5699	A 19970319
TW 552257	B	20030911	TW 1998-87103149	19980304
			GB 1997-5699	A 19970319
ZA 9801982	A	19980921	ZA 1998-1982	19980309
			GB 1997-5699	A 19970319
US 6284919	B1	20010904	US 1999-396637	19990915
			GB 1997-5699	A 19970319
			WO 1998-GB629	A1 19980227
US 20010051745	A1	20011213	US 2001-885187	20010621
US 6489506	B2	20021203		
			GB 1997-5699	A 19970319
			US 1999-396637	A1 19990915

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 129:232317

AB Ethylene is carbonylated into propanoic acid and its esters (e.g., Me propionate) in high yield and selectivity by its

liquid-phase carbonylation, in the presence of a catalyst system comprising Pd or a Pd compound, a bidentate phosphine ligand [e.g., 1,2-bis(di-*tert*-butylphosphinomethyl)benzene], and a source of anions (e.g., methanesulfonic acid), and in the presence of a source of hydroxyl groups (e.g., methanol). The carbonylation is carried out using a molar ratio of ethylene to carbon monoxide greater than 1:1, and preferably greater than 5:1; these higher ratios of ethylene to carbon monoxide result in increased catalyst turnover nos.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for the carbonylation polymerization of functionalized olefinically unsaturated compounds and polyesters and polyanhydrides therefrom
AN 1990:632315 CAPLUS
DN 113:232315
OREF 113:39215a,39218a
TI Process for the carbonylation polymerization of functionalized olefinically unsaturated compounds and polyesters and polyanhydrides therefrom
IN Drent, Eit; Breed, Anthonius Johannes Maria
PA Shell Internationale Research Maatschappij B. V., Neth.
SO Brit. UK Pat. Appl., 19 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2226822	A	19900711	GB 1988-30334	19881229
	US 5025092	A	19910618	US 1989-451920	19891218
				GB 1988-30334	A 19881229
	US 5128438	A	19920707	US 1991-680447	19910404
				GB 1988-30334	A 19881229
				US 1989-451920	A3 19891218

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 113:232315
AB Polyesters and polyanhydrides are prepared by reaction of (1) (un)substituted alkenols (OH on >4 C-atom from the nearest olefinic C-atom) or (2) (un)substituted alkenoic acids (CO₂H on >3 C-atom remote from an olefinic C-atom) with CO in absence of H₂O and in presence of a catalyst prepared by combining (a) a Pd(II) compound, (b) a monodentate organic phosphine and/or arsine and/or stibine optionally mixed with a bidentate phosphine, arsine, or stibine and (c) a protic acid, having pK_a < 2 (measured at 18° in aqueous solution), in which the molar ratio of (b)/g-Pd is ≥ 10, the molar ratio of (b)/(c) is > 1, and the temperature is < 140°. Thus, a stirred autoclave was charged with 50 mL diglyme, 20 mmol 10-undecenol, 0.4 mmol Pd(OAc)₂, 8 mmol Ph₃P, 4 mmol p-MeC₆H₄SO₃H, flushed with CO, pressurized with CO to partial pressure of 40 bar, and heated at 125° for 5 h. Conversion to polyester (number-average mol. weight 1700) was 98% with ratio of linear to α-branched links 7.3:1.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
TI Process for the carbonylation polymerization of dienes in the presence of dicarboxylic acids or diols as coreactants
AN 1990:632314 CAPLUS
DN 113:232314

OREF 113:39215a,39218a

TI Process for the carbonylation polymerization of dienes in the presence of dicarboxylic acids or diols as coreactants

IN Drent, Eit; Breed, Anthonius Johannes Maria

PA Shell Internationale Research Maatschappij B. V., Neth.

SO Brit. UK Pat. Appl., 19 pp.

CODEN: BAXXDU

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2226821	A	19900711	GB 1988-30333	19881229
	US 5049650	A	19910917	US 1989-451918	19891218
				GB 1988-30333	A 19881229
	US 5116936	A	19920526	US 1991-704546	19910523
				GB 1988-30333	A 19881229
				US 1989-451918	A3 19891218

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 113:232314

AB Polyesters or polyanhydrides are prepared by reacting nonconjugated dienes with CO and diols or dicarboxylic acids in absence of H2O and in presence of a catalyst of (a) a Pd(II) compound; (b) a monodentate organic phosphine and/or amine and/or stibine optionally mixed with a bidentate phosphine, amine, or stibine; and (c) ≤ 1 mol protic acid having $pK_a < 2$ (determined in aqueous solution at 18°) per mol of (b). Thus, charging an autoclave with 50 mL PhMe and 1,10-undecadiene 55, 1,4-butanediol 55, Pd(II) acetate 0.4, Ph3P 8, and p-MeC6H4SO3H 8 mmol, flushing with CO to 40 bar partial pressure, heating at 125° for 0.5 h, cooling to ambient temperature and venting gave complete conversion of 1,10-undecadiene to polyester (number-average mol. weight 6200; ratio of linear to α -branched links 10.5:1).

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN

TI Process for synthesis of amidoacids using a cobalt catalyst and a bidentate phosphine ligand

AN 1989:154881 CAPLUS

DN 110:154881

OREF 110:25635a,25638a

TI Process for synthesis of amidoacids using a cobalt catalyst and a bidentate phosphine ligand

IN Lin, Jiang Jen

PA Texaco Development Corp., USA

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 263624	A2	19880413	EP 1987-308490	19870925
	EP 263624	A3	19890419		
	EP 263624	B1	19921209		
	R: BE, DE, FR, GB, IT, NL			US 1986-916770	A 19861008
	US 4892687	A	19900109	US 1986-916770	19861008
	CA 1311244	C	19921208	CA 1987-545949	19870902
				US 1986-916770	A 19861008
	JP 63101354	A	19880506	JP 1987-252638	19871008
				US 1986-916770	A 19861008

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 110:154881; MARPAT 110:154881
 AB A process for producing a N-acetyl-8-amino acids
 $\text{RCH}(\text{CO}_2\text{H})\text{NHAc}$ (I; R = alkyl) or $\text{RCH}(\text{NAC})_2$ comprises reacting an α -olefin, an internal olefin, or allyl acetate with AcNH_2 , CO, and H in the presence of a Co-containing compound promoted by a bidentate phosphine ligand $\text{Ph}_2\text{P}(\text{CH}_2)_n\text{Ph}_2$ (n = 2,3,6) in a solvent at a pressure of at least 3.5 MPa (500 psi) and a temperature at least 50°. The process proceeds via olefin hydroformylation and amidocarbonylation. The above catalyst system provides advantages over the use of Co compds. alone such as improved yield of I, increased reaction rate, greater stability, and higher catalyst recovery. I are useful as surfactants and lubricants. The amino acid products of allyl acetate, i.e. $\text{AcO}(\text{CH}_2)_3\text{CH}(\text{CO}_2\text{H})\text{NHAc}$ and $\text{AcOCH}_2\text{CHMeCH}(\text{CO}_2\text{H})\text{NHAc}$, are useful in polyamide-ester synthesis. Thus, $\text{Co}_2(\text{CO})_8$, $\text{Ph}_2\text{PCH}_2\text{CH}_2\text{Ph}_2$, 1-tetradecene (II), AcNH_2 and p-dioxane were placed in autoclave with stirring. The system was purged with a mixture of CO/H (1:1 molar ratio) and pressured to 100 psi. At 130°, the pressure was raised to 800 psi and maintained at this pressure for 4 h by incremental addition of CO/H mixture to give $\text{C}_14\text{H}_29\text{CH}(\text{CO}_2\text{H})\text{NHAc}$ at ca. 85% selectivity over $\text{C}_14\text{H}_29\text{CH}(\text{NHAc})_2$ based on converted II.

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
 TI Polyketones
 AN 1986:498172 CAPLUS
 DN 105:98172
 OREF 105:15890h,15891a
 TI Polyketones
 PA Shell Internationale Research Maatschappij B. V., Neth.
 SO Neth. Appl., 7 pp.
 CODEN: NAXXAN

DT Patent
 LA Dutch

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	EP 181014	A1	19860514	EP 1985-201434	19850910
	EP 181014	B1	19881130		
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BR	8504887	A	19860722	NL 1984-3035	19851003

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Polyketones are manufactured by combined carbonylation-polymerization of CO with an olefinically unsatd. compound in the presence of a Group 8-10(VIII) catalyst (preferable Pd, Co, or Ni) with a bidentate ligand of formula

RR1M(CR4R5)MR2R3 (I; M = P, As, or Sb; R, R₁, R₂, R₃ are hydrocarbyl; R₄ and R₅ are H or non-sterically hindering hydrocarbyl; and n ≥ 2), and a carboxylate anion of an acid with pKa < 2 (especially CF₃CO₂H). I is present at 0.1-10:1 (mol. ratio) with the Group 8-10 metal. The olefinically unsatd. compds. include C₂-30 (preferably C₂-12) alkenes or cycloalkenes and is most preferable C₂H₄; other compds. include styrene, α -methylstyrene, (meth)acrylic acid and their esters, and nonconjugated dienes. Homogeneous catalysts are preferred. The product has the general formula [C(:O)Am]_n in which A is derived from the monomer, m is a small integer (e.g., 1-6), and n > 10. Thus, C₂H₄ was polymerized with CO (1:1 at 20 bar each) at 90° in the presence of 50 mL MeOH, Pd(OAc)₂ 0.1, 1,3-bis(diphenylphosphine)propane 0.15, and CF₃CO₂H 2 mmol., resulting in 2000 g polymer produced per g Pd per h.

OSC.G 89 THERE ARE 89 CAPLUS RECORDS THAT CITE THIS RECORD (93 CITINGS)

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COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY          SESSION
FULL ESTIMATED COST          46.31          46.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE      TOTAL
                                                ENTRY          SESSION
CA SUBSCRIBER PRICE           -4.25          -4.25

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SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:36:07 ON 21 JUL 2010